DOCUMENT RESUME

ED 338 364 PS 019 917

AUTHOR Hencke, Rebecca W.
TITLE Who Me? Individual Differences in Preschool Children's Understanding of Nice and Mean Attributes in the Self.
PUB DATE 90
NOTE 22p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Antisocial Behavior; Cognitive Development; Emotional Development; *Individual Differences; Personality; *Preschool Children; Preschool Education; *Prosocial Behavior; Shyness; *Social Cognition; *Social Development; Story Telling; Violence
IDENTIFIERS Guttman Scales

ABSTRACT

This study addressed the question of whether there are individual differences between children in the development of their understandings of social interactions. A total of 48 children between 2.5 and 5.5 years of age were engaged in telling stories with sequences about nice or mean peers. Children acted out stories with dolls and answered questions about the stories. Coders rated children's behavior in warm-up activities and scored the stories. In order to pass, a child's story and explanation had to show a minimum level of complexity. A total of 7 children passed on more stories on the nice sequence than the mean; 17 passed on more mean stories; and 24 passed on the same number for each sequence. Discriminant analysis revealed that shyness and low physical activity predicted better performance on the nice sequence; while talkativeness and violence predicted better performance on the mean sequence. These results indicate that understandings of opposite valence (nice and mean) do emerge independently of one another. A list of 16 references is included. (Author/BC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED338364

Who Me? Individual Differences in Preschool Children's Understanding of Nice and Mean Attributes in the Self

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Rebecca W. Hencke

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Rebecca W. Hencke

Harvard University

PS 019917

RUNNING HEAD: CHILDREN'S UNDERSTANDING OF NICE AND MEAN IN THE SELF

BEST COPY AVAILABLE

ABSTRACT

Forty eight children participated in tests of two sequences of stories concerning nice and mean social interactions. As predicted, both the nice and the mean sequences were found to be highly Guttman scalable; but there were substantial individual differences in comparative performance on the two scales. Seven children passed more stories on the nice sequence than the mean, Seventeen passed more mean stories, and twenty-four passed the same number on each sequence. Discriminant analysis revealed that shyness and low physical activity predicted better performance on the nice sequence; while talkativeness and violence in storytelling predicted better performance on the mean sequence. The salience of "niceness" to individual self image and self presentation is suggested as underlying these individual differences.

Who Me? Individual Differences in Preschool Childrens' Understanding of Nice and Mean Attributes in the Self

The relationship of cognition and emotion is the subject of much discussion at this time. Certain aspects of this relationship, such as the splitting of emotions by valence (Osgood, Suci, and Tannenbaum, 1957) have been thoroughly researched. The developmental aspects, however, are just beginning to be explored.

The existence of variations in attributional style among children, with a clear linkage to social-emotional development, has been demonstrated convincingly by Dodge's (1986) study of hyperaggressive children. Research in the use of trait explanations for success and failure (Benenson and Dweck, 1986) has shown that not only do such explanations increase in frequency with age, but they emerge first for success, then failure, first for others, then for the self.

Despite the explosion of interest in the topic, very little of the recent research concerning individual differences in the patterns of growth in emotional understanding has taken a Piagetian-structuralist perspective. The study of developmental social cognition has been dominated by outgrowths of Piagetian theory such as Kohlberg's (1969) theory of moral development and Selman's (1980) work on social perspective taking, which share the Piagetian bias toward universal stages emerging across domains. Recently, however, neo-Piagetian theories such as skill theory (Fischer, 1980), which emphasize the universality of decalage, and the existence of different levels of understanding in different domains, have begun to influence the study of children's developing social and

emotional cognitions.

Susan Harter (1986) looked at young chilldren's ability to explain multiple emotions within one person, using a developmental scheme based on skill theory (Fischer, 1980). She found a developmental progression of skills in integrating multiple emotions, with the integration of opposite-valence emotions always appearing later than integration of same-valence emotions. Building on Harter's research, Nannis and Cowan (1987) explored differences between understanding of emotions within the self and others and found that children could explain the bases of their own emotional state earlier than they could explain the reason for anothers'.

The question of how children handle opposite valence emotions, moral judgments, and social interactions has generated considerable research interest (Sobesky, 1976; Hand, 1981; Harter, 1986; Stein and Levine,1990). Studies focusing on differences between children's handling of positive and negative emotions, judgments and interactions have consistently found differences between positive and negative, but the many of the differences were inconsistent and/or statistically nonsignificant (Sobesky, 1976; Hand, 1981). Part of the reason for the inconsistent results of Hand (1981) and Sobesky (1976) can be attributed to the use of interviews, which do not provide the high support conditions necessary to elicit optimal performance, and part from the failure to consider individual differences besides age as contributors to differential performance. We hypothesized that differences in personality and social experience would contribute along with age and gender to differences in children's understanding, and that consistent and interesting differences in understanding could be detected if the task provided the scaffolding

necessary to support optimal level performance.

We addressed ourselves to the question of whether there are individual differences between children in the development of their understandings of social interactions, specifically:

a) Do understandings of different types of interactions emerge in synchrony?

b) Do all children show the same pattern for emergence of understanding?

c) If different developmental patterns exist, is it possible to predict the pattern which an individual child is most likely to show?

METHOD

Participants. Forty eight children between the ages of 2 1/2 and 5 1/2 (mean age 4.23) participated in a guided storytelling situation. Boys and girls were equally distributed within each age group. All children were from middle class families living in suburbs of Boston, MA. The general level of parental education was high, with over 90% of both mothers and fathers holding college degrees.

Measures employed. A set of stories concerning nice and mean interactions between playmates, based on those used by Hand (1981), was constructed (see Table 1 below). All stories were developed using the strong scalogram method (Fischer and Corrigan, 1981) to reflect increasing levels of cognitive complexity as outlined by skill theory (Fischer, 1980). Nice and mean stories were matched for number of characters, word length, and level of cognitive complexity. Previous research had confirmed that the original story sequence was highly Guttman scalable.

Table 1: Nice and Mean story sequence (from Fischer, Hand, Van Parys, Tucker and Watson, 1984)

A Developmental Sequence of Skills for Mean and Nice Social Interactions

Level	Step	Skill	Examples in Play
Rp1: Single Representational Skills	1	Active agent: A person performs at least one behavior fitting a social-interaction category of mean or nice.	Child makes one doll hit another doll (mean) or give another doll candy (nice).
	2	Behavioral category: A person performs at least two behaviors fitting a category of mean or nice.	Child makes one doll act mean to another doll, hitting it and saying, "I don't like you." The second doll can be passive.
	3	Shifting behavioral categories: One person performs at least two behaviors fitting the category nice, as in Step 2, and then a second person performs at least two behaviors fitting the category mean.	Child makes one doll act nice to a second doll, giving it candy and saying, "Let's play." A third doll enters and acts mean to the second doll, hitting it and taking its ball. In both cases, the second doll can be passive.
Rp2: Representational Mappings	4a*	Combination of opposite categories in a single person: One person performs concurrent behaviors fitting two categories, such as nice and mean.	Child makes one doll act both nice and mean to a second doll, saying "Let's be friends," giving the second doll candy, and then hitting it and saying, "Since we're friends, you should give me your ball!" The The second doll can be passive throughout.
	4b*	One-dimensional social influence: The mean behaviors of one person produce reciprocal mean behaviors in a second person. The same contingency can occur for nice behaviors.	Child makes one doll say mean things and hit another doll, who responds by hitting and expressing dislike for the first one. The second one's behavior is clearly produced by the first one's behavior.
	5	One-dimensional social influence with three people behaving in similar ways: Same as Step 4b, but with three people interacting reciprocally in a mean way (or a nice way).	With three dolls, child makes one tease the others, while a second one hits the others. The third doll rejects both of the first two because they are mean.

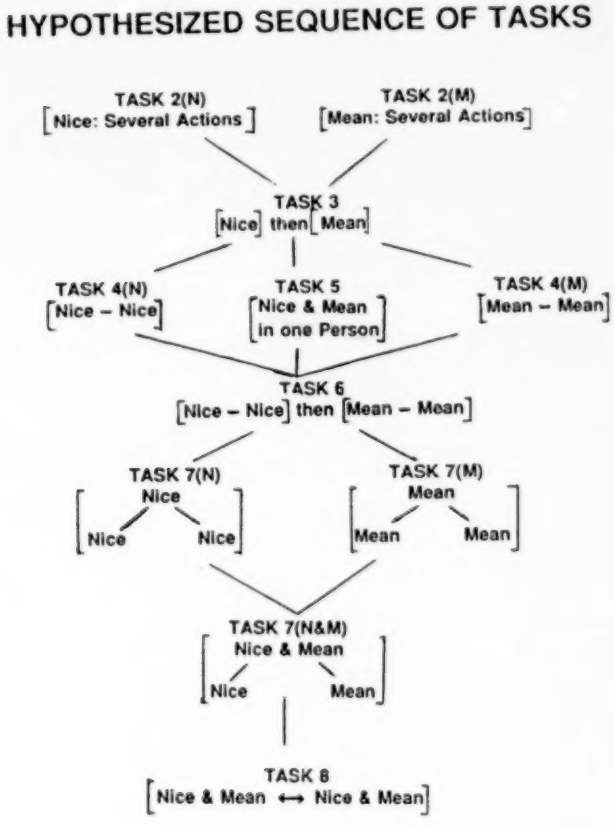
Level	Step	Skill	Examples in Play
	6	Shifting one-dimensional social influence: The nice behaviors of one person produce reciprocal nice behaviors in a second person. Then, in a separate story, the mean behaviors of a third person produce reciprocal mean behaviors in the second person. (Or a reciprocal mean interaction can occur first, and then a reciprocal nice interaction.)	With three dolls, child makes one act friendly to a second one, who responds nicely. Then, a third doll hits the second one, who responds meanly.
	7	One-dimensional social influence with three people behaving in opposite ways: The nice behaviors of one person and the mean behaviors of a second person produce reciprocal nice and mean behaviors in a third person.	With three dolls, child makes one act friendly to others, while a second one hits others. The third doll responds nicely to the first doll and meanly to the second.
Rp3: Representational Systems	8	Two-dimensional social influence: Two people interact in ways fitting opposite categories, such as that the first one acts both nice and mean and the second one responds with reciprocal behaviors in the same categories.	Child makes one doll initiate friendship with a second doll but in a mean way. The second one, confused about the discrepancy, declines the friendship because of the meanness. The first then apologizes and makes another friendly gesture, which the second one responds to accordingly.

Procedure. After greeting the children and getting acquainted, the experimenter and child engaged in alternating storytelling using the Nice and Mean/Peer stories (Fischer, Hencke, and Hand, 1990). Each story in both the nice and the mean sequences was administered to forty-eight preschool children, using the elicited imitation technique developed by Fischer and Watson (1980). All stories were acted out with dolls, named for the participant and his/her friends. In each case, the experimenter first demonstrated the story, then requested that the child repeat it and answer questions about it. All sessions were videotaped. Coders rated children's behavior, based on warm up activities, then scored the elicited stories. In order to pass, the child's story and/or explanation had to show the minimum level of complexity necessary for understanding the story.

Results

Developmental patterns. In order to ascertain the degree of fit between actual responses and the sequence predicted, children's responses for the full sample on all tasks were analyzed using Partially Ordered Scaling of Items (POSI). Results of this analysis (see Figure 2) were then compared to the hypothesized sequence (see Figure 1). Comparison of Figures 1 and 2 reveals two primary differences between actual and hypothesized results: the easiest mean task (2M) was passed earlier than the easiest nice task (2N), and tasks 7 and 8 were mastered at approximately the same age. As predicted, understandings of nice and mean interacations emerged independently.

Figure 1. Hypothesized sequence of tasks based on skill theory (Fischer, 1980)



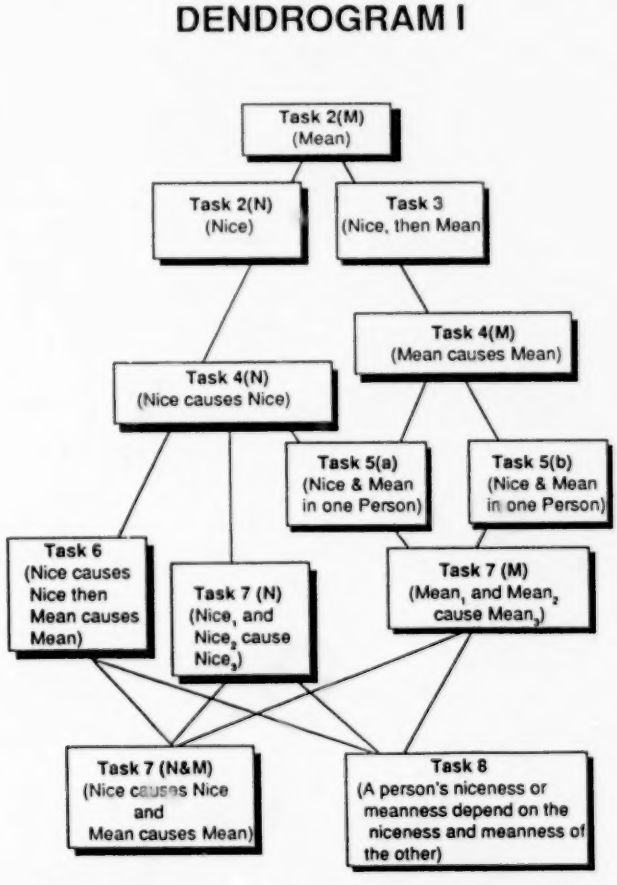
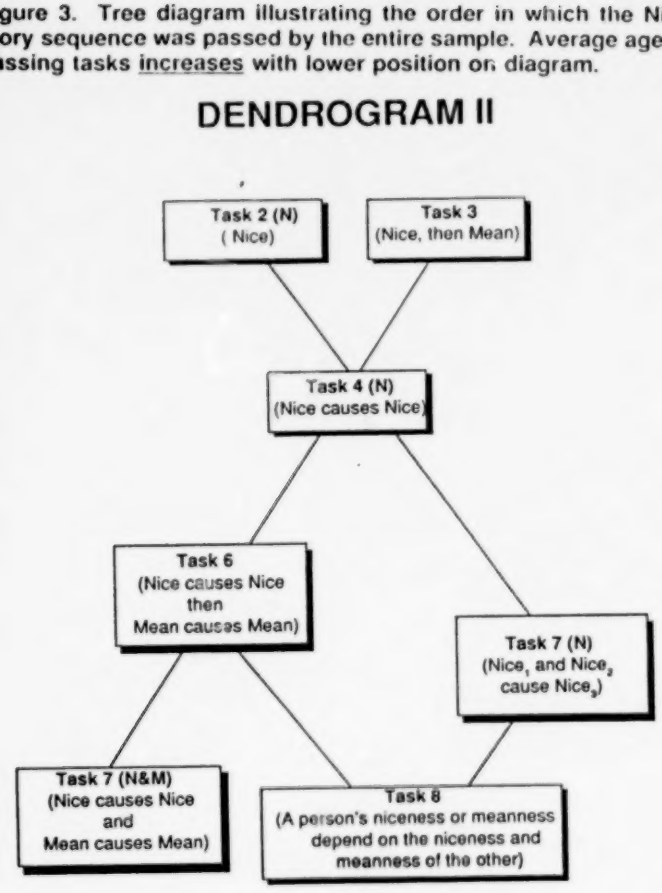


Figure 2. Tree diagram illustrating order in which the combined sequence of Nice and Mean story tasks were passed by the entire sample. Average age of passing tasks increases with lower position on diagram.

gure 3. Tree diagram illustrating the order in which the Nice ory sequence was passed by the entire sample. Average age of ssing tasks increases with lower position on diagram.



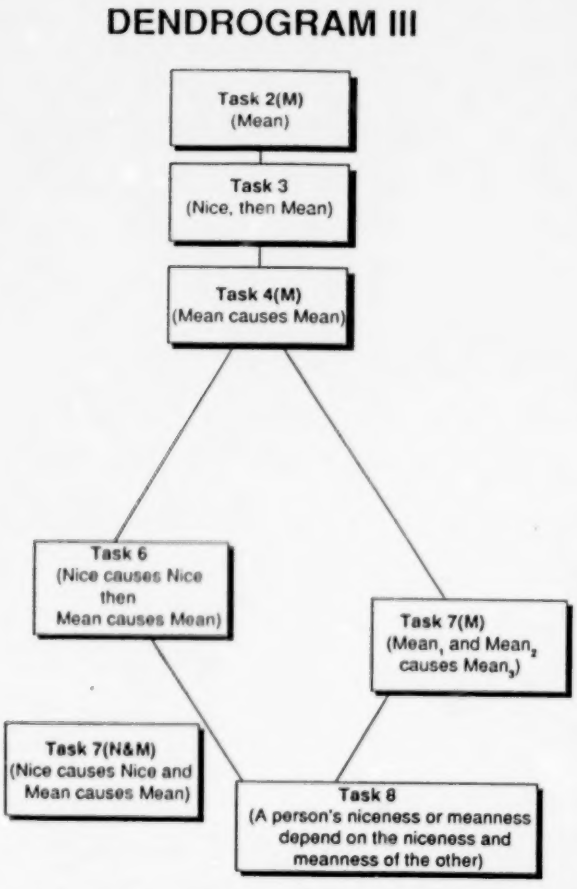


Figure 4. Tree diagram illustrating the order in which the Mean story sequence was passed by the entire sample. Average age of passing tasks increases with lower position on diagram.

Since nice and mean tasks emerged independently, the full set of items was next divided into two ordered scales. Results of POSI analyses performed on each scale can be seen in Figures 3 and 4. Results for the mean story sequence exactly fit the order predicted in Table 1, while those for nice stories diverge only at the earliest level, with the simplest nice story (2N) being passed at approximately the same age as the story about a nice interaction followed by a mean one.

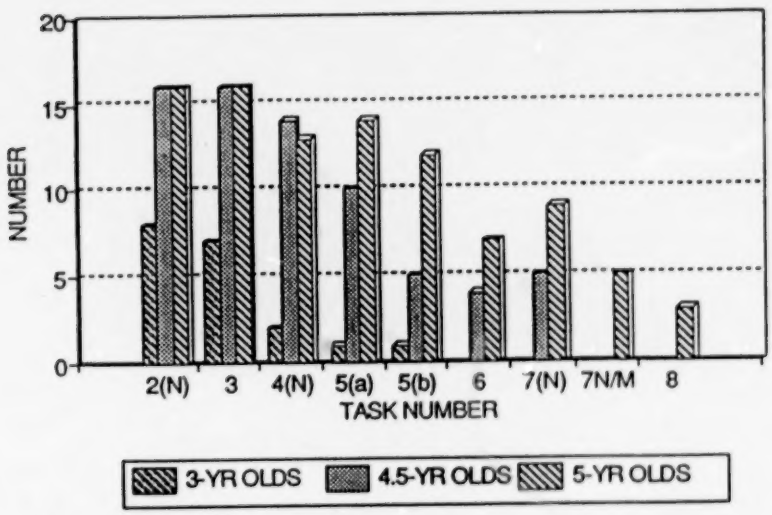


Figure 5. Number of children in each age group passing nice stories.

Examination of the number of stories in each sequence passed by the three age groups (Figures 5 and 6) indicates that the number of children passing each story increased with age. More interestingly, it also indicates that more three year olds passed mean tasks than nice. For the simplest tasks, twelve three year olds passed 2(M), while only eight passed 2(N). At a higher level of complexity, six of the three year olds

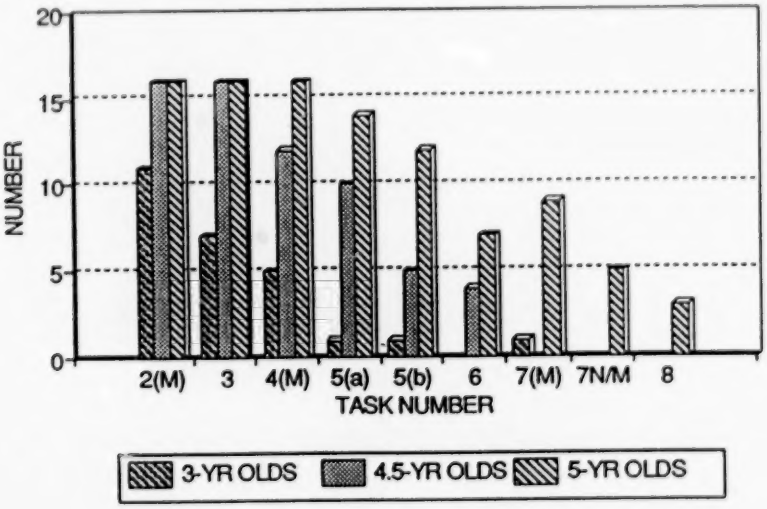


Figure 6. Number of children in each age group passing mean stories.

Individual differences. Approximately 15% (7) of the children we interviewed showed negative reactions to the mean stories. Most of these reactions took the form of total denial that the self doll could do anything mean. This denial made it impossible for them to pass many of the tasks involving mean interactions. The tree diagram in Figure 7 was generated by hand from the responses of the seven children who showed this preference for nice stories (Group 1). The pattern of responses which it illustrates indicates that children in this group could pass more complex nice stories than mean at every point. They were also unable to pass stories requiring the integration of nice and mean in the same interaction until after passing the mean story of the preceding level. Significantly, none of the children in this group passed Tasks 7(M), 7(M&N), or 8.

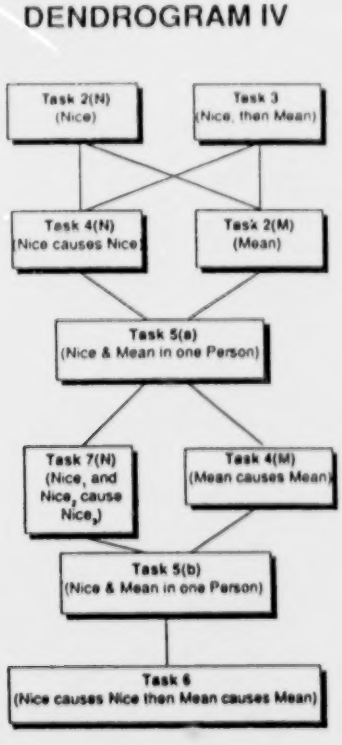
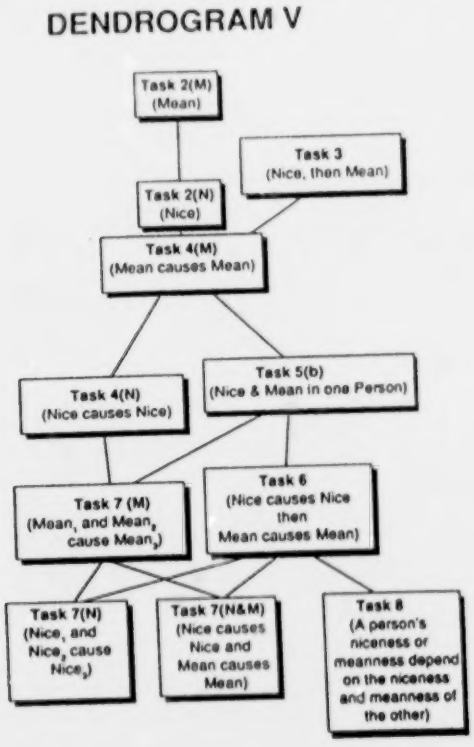


Figure 7. Tree diagram illustrating the order in which the combined sequence of Nice and Mean tasks was passed by members of Group 1, who preferred nice stories. Average age of passing tasks increases with lower position on chart.

Figure 8. Tree diagram illustrating the order in which the combined sequence of Nice and Mean tasks was passed by members of Group 3, who preferred mean stories. Average age of passing tasks increases with lower position on chart.


DENDROGRAM V
Task 2(M) (Mean)
Task 3 (Nice, then Mean)
Task 2(N) (Nice)
Task 4(M) (Mean causes Mean)
Task 4(N) (Nice causes Nice)
Task 5(b) (Nice & Mean in one Person)
Task 7 (M) (Mean, and Mean, cause Mean,)
Task 6 (Nice causes Nice then Mean causes Mean)
Task 7(N) (Nice, and Nice, cause Nice,)
Task 7(N&M) (Nice causes Nice and Mean causes Mean)
Task 8 (A person's niceness or meanness depend on the niceness and meanness of the other)

Seventeen of the children (35%) showed a distinct preference for the mean stories. These children complained that the nice stories were "boring", and enjoyed making the dolls act mean to each other. The tree diagram in Figure 8 illustrates the ordering of the tasks produced by a Partially Ordered Scaling of Items (POSI) conducted on their responses. For this group of children (Group 3), the mean tasks were passed before the nice tasks of the same complexity, and integrating nice and mean behaviors emerges simultaneously with the mastery of nice stories of the same complexity.

Examination of the average ages for members of each group to pass the nice tasks revealed that the primary difference between groups on these tasks emerged at the highest level of difficulty, with the group who preferred nice stories (GRP 1) passing task 7(N) at an average age of 4.75 years, while those showing no preference (GRP 2) and those preferring mean stories (GRP 3) passed it at nearly identical ages (4.94 and 4.96 years, respectively).

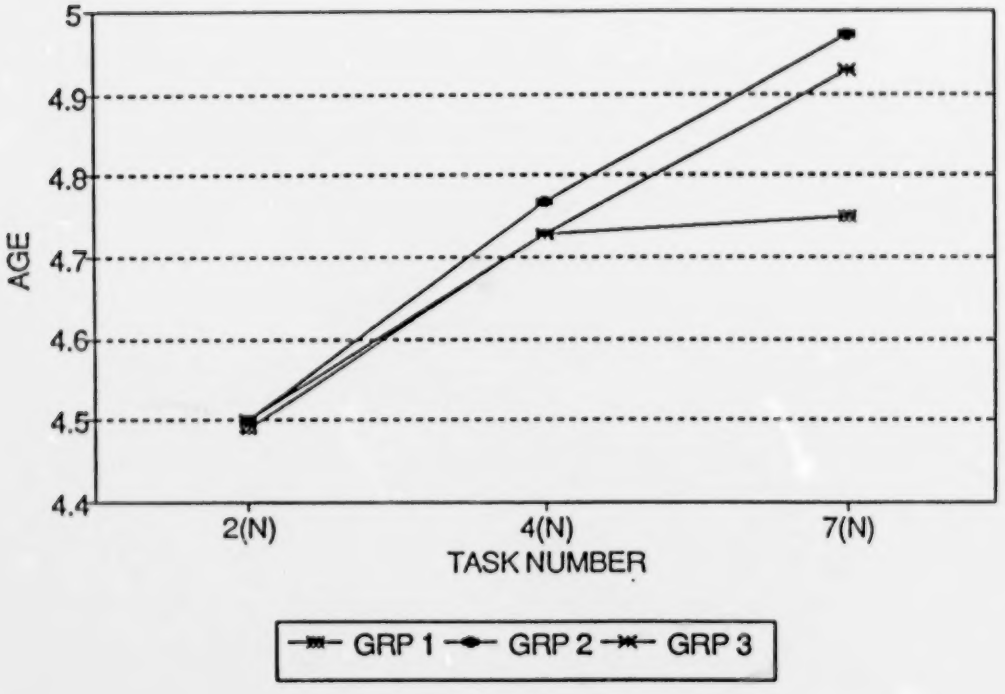


Figure 9. Average ages for Groups 1,2, and 3 to pass nice stories.

Examination of the average ages for members of each group to pass the mean tasks revealed that differences between the groups were larger at almost all levels of this sequence. Children who preferred mean stories (GRP 3) passed all of them at younger ages than did those with no preference (GRP 2) and those who preferred nice (GRP 1). The primary difference between Groups 1 and 2 on this scale was again at the level of highest complexity, with children in Group 2 passing task 7(M) at an average age of 4.95, while the mean age shown for group 1 exceeds the mean age of the sample, reflecting the fact that no members of the group who preferred nice stories passed this task.

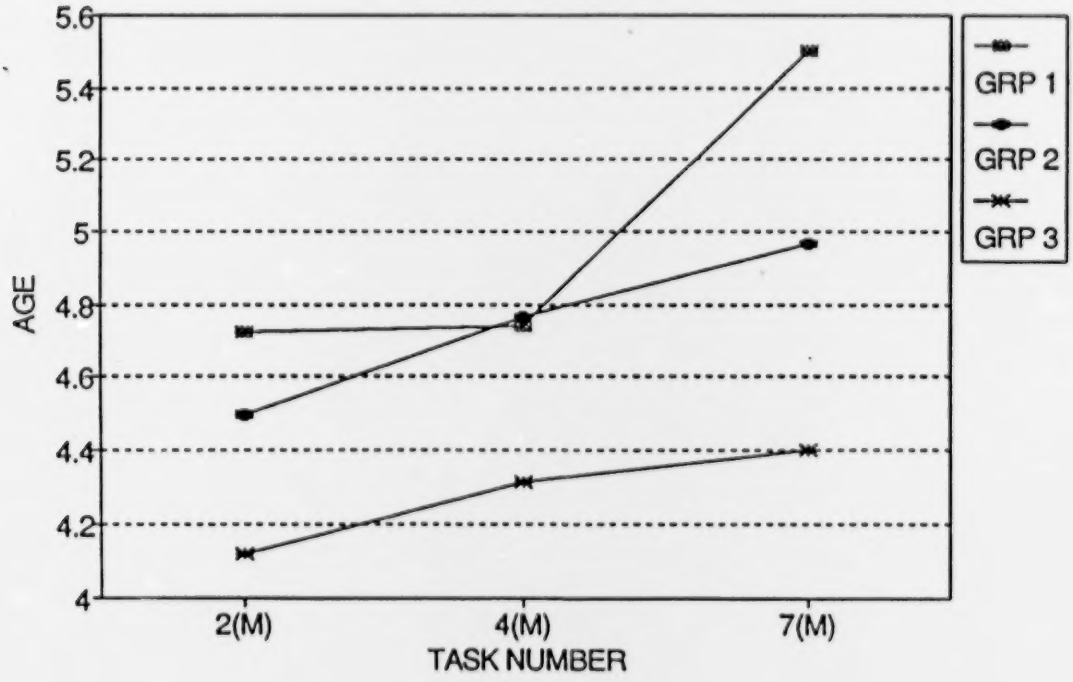


Figure 10. Average ages for Groups 1,2, and 3 to pass mean stories

The effects of gender and age on group membership were examined next. Figure 11 illustratees the total lack of gender effects on story preference, while Figure 12 indicates that age appears to be strongly related to membership in Group 1, with 88% of the children preferring nice stories falling between 4.5 and 5.0 years of age.

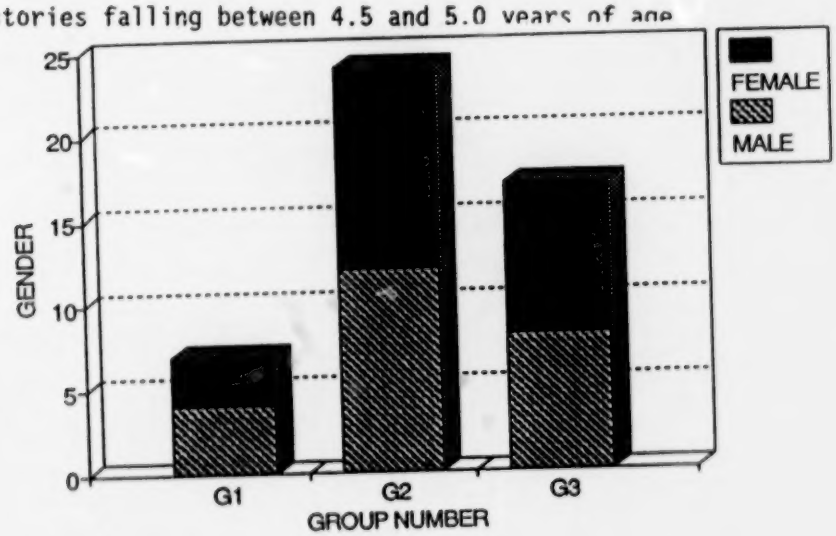


Figure 11. Number and gender of children in Groups 1, 2 and 3.

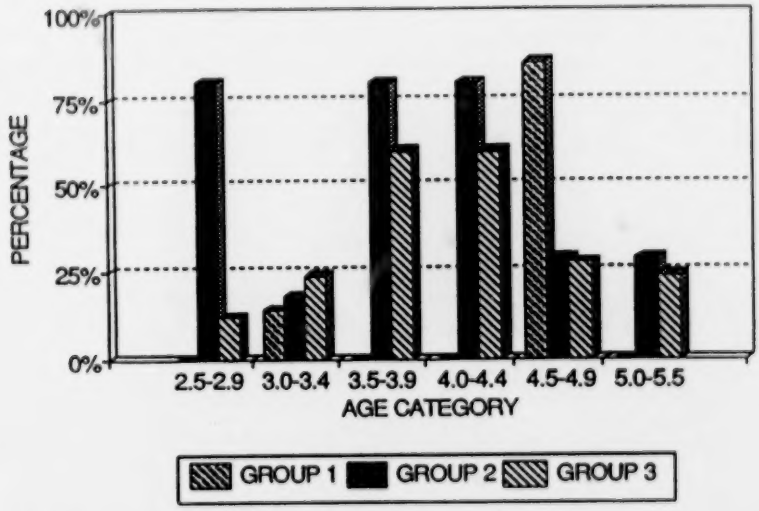


Figure 12. Percent of Groups 1,2, and 3 in different age categories.

Finally, the average scores for each group on the behavioral assessment were compared, yielding highly significant and interesting relationships. Figure 13 shows the average group scores (on a seven point scale) for each group on the four behaviors identified by discriminant analysis as predicting group membership. As can be seen, the children who preferred nice stories (GRP 1) were rated as significantly more shy than those with no preference (GRP 2) and those preferring mean (GRP 3). Activity level, talkativeness, and violence in storytelling all increased from Group 1 to Group 3.

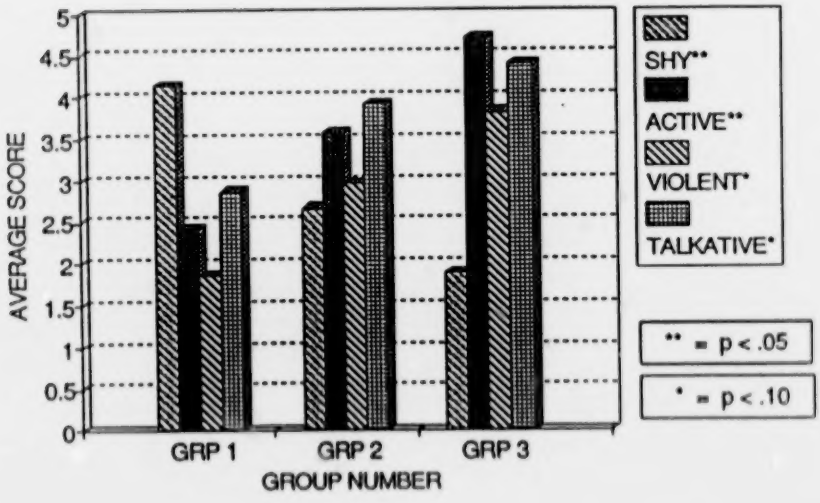


Figure 13. Average scores on behavioral assessments for Groups 1,2, and 3.

Discussion

Results of the analyses conducted on the full sample of children indicate that understandings of opposite valence (nice and mean) interactions do emerge independently of one another. Furthermore, both the POSI analyses (Figures 1,2, and 3) and the data on average age of passing tasks reveal a consistent tendency for younger children to perform best on mean stories. The fact that tasks 7 and 8 appeared not to sequence as predicted can be attributed to the small number of children who passed either one (5 and 3 respectively).

There are two findings in the analysis of individual differences in performance which ore of interest. The first of these concerns the conjunction between the age range of Group 1 and the fact that the greatest group differences were apparent on Tasks 7(N) and 7(M). According to skill theory (Fischer, 1980), the ability to comprehend multiple causal relations (as in tasks 7(N) and 7(M)) requires the ability to construct a compounded mapping of causality, an ability typically emerging around 4 1/2 years. These tasks, then, were at the upper level of complexity manageable by the children in Group 1. This implies that individual differences in understanding between domains are best measured by parallel tasks at the optimal level of complexity for the age.

The second finding of interest concerning individual differences in understanding is the finding that behavioral ratings related to temperament or personality were the best predictors of children's story preference. The shyness ratings showed such a strong inverse relationship to talkativeness and activity level that they suggest shyness functions as a latent variable indexed by activity and talkativeness, along with

separation behavior. These results are consistent with the behavioral differences noted by Kagan(1984) between temperamentally inhibited and uninhibited children, and suggest that temperamental differences may underlie group differences in story preference. The fact that the shy children tended to fail mean tasks because they denied that the doll with their own name ("Self" doll) acted mean suggests that the qualiaties of "niceness" and "meanness" are viewed differently by shy and outgoing children. More inhibited children appear to find "niceness" more salient to the self-schema (Markus and Sentis, 1982) and to be more concerned about social desireability than the less inhibited. These observations, along with Kagan's (1989, personal communication) finding that older inhibited children see themselves as "liking to follow the rules" suggest that exploration of differences between children's understandings of positive and negative attributes in the self versus others may be quite revealing.

The data presented here indicate that understandings of nice and mean interactions do develop separately, and that the decalage between them reveals important individual differences in social cognitive processing. These individual differences between normal, high functioning children demonstrate that development follows not just one, but many, potential pathways. Within this normal sample, the behavioral measures suggest that temperamental differences can produce different developmental paths, with more inhibited children placing much greater importance on a view of the self as "nice", or socially acceptable. Further research is needed in order to establish the effects on development of other personality variables, including clinical psychopathology.

References

Benenson, J. & Dweck, C. (1986). The development of trait explanations and self-evaluations in the academic and social domains. Child Development, 57, 1179-1187.

Dodge, K. (1987). Social-information -processing factors in reactive and proactive aggression in children's peer groups. Journal of Personality and Social Psychology. 53(6), 1146-1158.

Fischer, K. (1980). A theory of cognitive development: the control and construction of hierarchies of skills. Psychological Review, 87(6), 477 - 531.

Fischer, K., Hand, H., Van Parys, M., Watson, M., & Tucker, J. (1984). Putting the child into socialization: the development of social categories in preschool children. In L. Katz (Ed.), Minnesota Symposium on Child Psychology. (vol. 18, pp. 137-178). Hillsdale, N.J., Erlbaum.

Fischer, K.W. & Corrigan, R. (1981). A skill approach to language development. In R. Stark (Ed.) Language behavior in infancy and early childhood, Amsterdam,: Elsevier-North Holland, 1981.

Fischer, K.W. & Watson, M. (1980). Development of social roles in spontaneous behavior during the preschool years. Developmental Psychology, 16 , 483 - 494.

Fischer, K.W., Hencke R.W. & Hand, H (1989). Cognitive development laboratory manual: Nice and Mean interaction/Peers. Unpublished manuscript. Harvard University Graduate School of Education.

Hand, H. (1981). The development of concepts of social interaction: childrens' understanding of nice and mean. Unpublished Doctoral

Dissertation. University of Denver.

Harter, S. (1986). Cognitive-developmental processes in the integration of concepts about emotions and the self. Social Cognition, 1, 119 - 154.

Isen, A. (1984). Toward understanding the role of affect in cognition. In R. Wyer, Jr., & T. Srull (Eds.), Handbook of Social Cognition. Hillsdale, NJ: Erlbaum.

Kohlberg, L. (1969). Stage and Sequence: the cognitive developmental approach to socialization. In D. Goslin (Ed.) Handbook of Socialization Theory and Research. (pp. 347-480). New York: Rand McNally.

Markus, H. & Sentis, K. (1982). The self in social information processing. In J. Suls (ED.) Psychological Perspectives on the Self (Vol I, pp. 41 - 70). Hillsdale, NJ: Erlbaum.

Nannis, & Cowan (1987). Emotional Understanding: a matter of age, dimension, and point of view. Journal of Applied Developmental Psychology, 8, 289-304.

Selman, R. (1980). The Interpersonal World of the Child. New York: Academic Press.

Sobesky, W. (1976). The development of the child's ability to evaluate "good" within a moral context. Unpublished Master's thesis, University of Denver.

Stein, N. & Levine, L. (1990). The causal organization of emotional knowledge: a developmental study. Cognition and Emotion. In press.